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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,638

09/18/2003

William J. Borland

EL0499 US NA

5044

23906

7590

06/19/2006

E I DU PONT DE NEMOURS AND COMPANY

LEGAL PATENT RECORDS CENTER

BARLEY MILL PLAZA 25/1128

4417 LANCASTER PIKE

WILMINGTON, DE 19805

EXAMINER

HA, NGUYEN T

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/664,638

Applicant(s)

BORLAND ET AL.

Examiner

Nguyen T Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13, 14, 16, 17, 19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 14, 16, 17, 19 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) /
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 13-14, 16-17, 19 and 21-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 13-14, 16-17, 19 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 6,266,226) in view of deNeuf et al. (US 5,347,423).

Regarding claim 13, Hayashi discloses a capacitor (1A-1B & 2A-2B) comprising:

- a first electrode/lower electrode (11) comprising a first plurality of electrode portions/element electrodes (15);

- a first dielectric (13) over the first electrode; and
- a second electrode/upper electrode (12) formed from a metallic foil and disposed over the first dielectric.

Hayashi lacks one or more of the plurality of electrode portions are trimmed to achieve a target capacitance value.

deNeuf et al. teach a trimming electrode (figures 3a-3b, and column 6, lines 49-68, column 7, lines 1-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the deNeuf et al.'s electrode in Hayashi in order to achieve the result in very precise adjustment of the capacitance.

Regarding claim 14, Hayashi further discloses the dielectric material (13) that contacts and substantially encases the capacitor (figure 1A).

Regarding claim 16, Hayashi discloses a capacitor (figures 1A-1B & 2A-2B) comprising:

- a first electrode/lower electrode (11) comprising a first plurality of electrode portion/element electrode (15);
- a second electrode/upper electrode (12) comprising a second plurality of electrode portions/element electrode (16) spaced from an inter-digitated with the first plurality of electrode portions (figure 1A), wherein the first and second electrodes are formed from a metallic foil; and
- a dielectric (13) disposed between the first and second plurality of electrode portions.

Hayashi lacks one or more of the plurality of electrode portions are trimmed to achieve a target capacitance value.

deNeuf et al. teach a trimming electrode (figures 3a-3b, and column 6, lines 49-68, column 7, lines 1-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the deNeuf et al.'s electrode in Hayashi in order to achieve the result in very precise adjustment of the capacitance.

Regarding claim 17, Hayashi further discloses the dielectric material that contacts and substantially encases the capacitor (figure 1A).

Regarding claim 19, Hayashi disclose the first plurality of electrode portions (15) comprises at least four electrode portions (figure 1B).

Regarding claim 21, Hayashi discloses a printed wiring board containing the capacitor (column 2, lines 36-37).

Regarding claim 22, Hayashi discloses the plurality of electrode portions comprises at least four electrode portions (figure 7).

Regarding claim 23, Hayashi discloses the metallic foil comprises copper (column 6, lines 1, and 39-40).

Regarding claim 24, the teaching of deNeuf et al. included a third electrode (14') and second dielectric disposed on the second electrode, wherein the second electrode is isolated from the first and third electrodes, and wherein the first and third electrodes are separated from the second electrode by the first and second dielectric which forms a two layer dielectric (figure 6).

Regarding claim 25, Hayashi discloses the metallic foil comprises copper (column 6, line 1, and lines 39-40).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NGUYEN T. HA  
PRIMARY EXAMINER

NH

June 7, 2006